

ABSTRACT OF THE DISCLOSURE

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The disclosure describes a DC motor including a rotor unit arranged within the motor body and has a cylindrical field magnet fixed to an outer surface of a holder. The holder has a rotating shaft press-fitted through the center, and the cylindrical field magnet has the S and the N poles alternately around a circumference. There is a stator unit which is circumferentially arranged around the rotor unit, that is made of a plurality of stator yokes that are arranged so that they oppose the field magnet through a small gap. Each of the stator yokes is formed by circumferentially stacking a large number of thin plates, each consisting of a salient pole, and a number of coil units, each formed by winding a magnet wire on a bobbin, and mounting the bobbins on the stator yokes. In the described arrangement, each of the S and N poles has a plurality of stages formed in an axial direction and shifted from each other in the circumferential direction by a predetermined shift amount with respect to the field magnet.